(No Model.)

W. A. FRICK.

PIPE MOLD.

No. 365,176. Patented June 21, 1887.

Fig 1

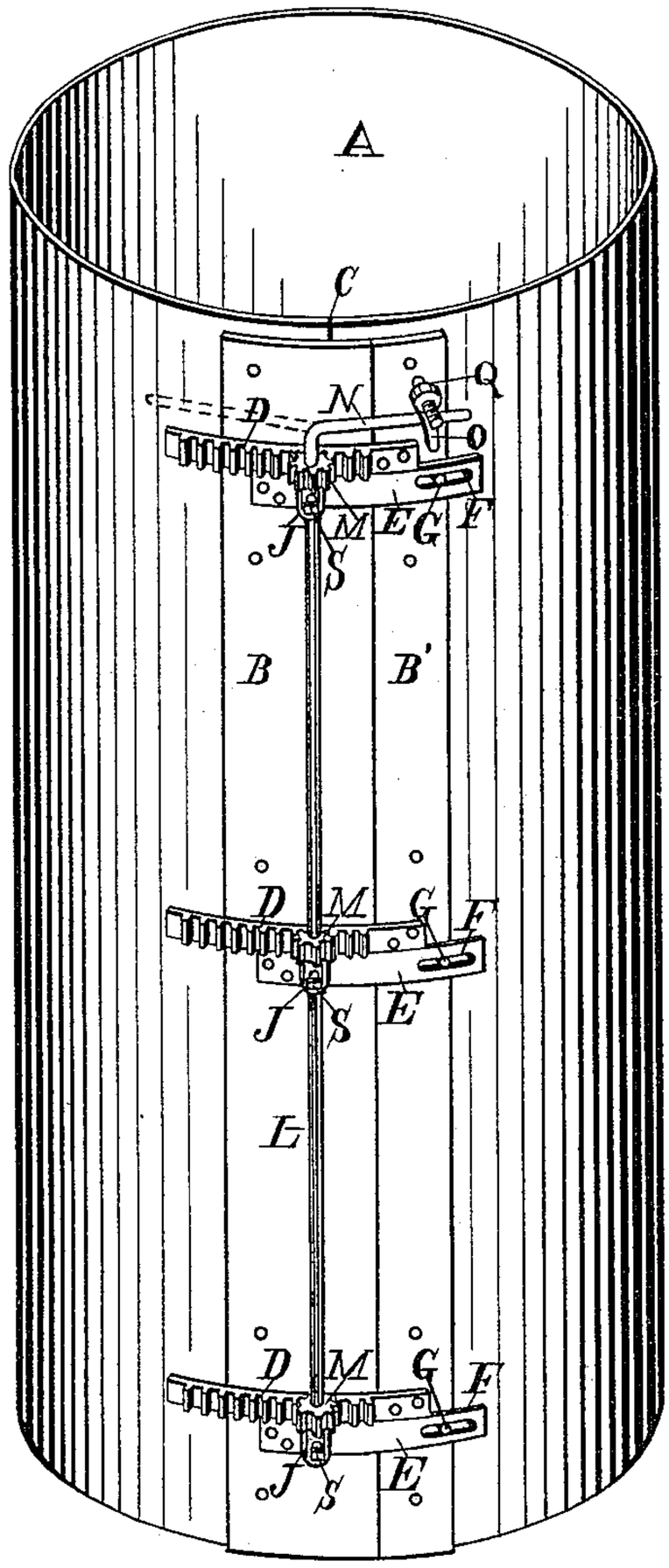
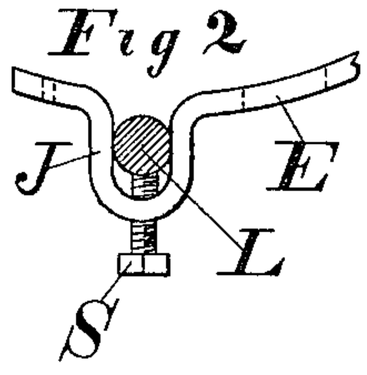


Fig 2



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UNITED STATES PATENT OFFICE.

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PIPE-MOLD.

SPECIFICATION forming part of Letters Patent No. 365,176, dated June 21, 1887.

Application filed January 3, 1887. Serial No. 223,269. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. FRICK, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Improvement in Pipe-Molds, of which the following is a specification.

My invention relates to means for opening, closing, and locking the spring-jackets and cores of molds for manufacturing artificial-stone pipe.

The object of my invention is to provide means whereby the jacket may be opened to release the pipe with a perfectly smooth and even motion, and without any jar which might tend to injure the pipe.

A further object is to provide means for securely locking the jacket in its closed position.

I accomplish these objects by means of the device described herein, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a pipe-mold spring-jacket provided with my improvement. Fig. 2 is a plan view illustrating the manner in which the shaft is mounted upon the jacket.

A is the spring-jacket. B B′ are perpendicular plates secured to the outside thereof. The plate B extends beyond the edge of the side of the jacket to which it is secured, so as to lap upon the other side of the jacket when the jacket is closed, and the plate B′ is set back from the edge of the side of the jacket to which it is secured such a distance as to allow the jacket to be closed before the plate B will come into contact with the plate B′. Segmental cogs D D D are secured to the plate B′ and extend across the plate B when the jacket is closed. Straps E E E are secured to the plate B and extend across the plate B′. A slot, F, is provided in the end of each strap, and studs G project from the plate B′ through the slots to serve as stops to prevent the jacket from being opened too wide. A loop, J, is made in each strap to form journals in which the shaft L, provided with pinions M, is mounted. The pinions M engage with the segmental cogs D. The upper part of the shaft L is bent to form the crank N, whereby the shaft may be partially rotated to open and close the jacket. A spanner, O, is screwed upon the stud Q, which is attached to the plate B′ above the point where the bent end of the shaft will come when the mold is closed, as shown in the drawings, in order to secure the shaft and prevent it from turning, thus locking the jacket when closed. I provide set-screws S in the loops or journals J to hold the pinions M firmly against the racks or segmental cogs D. When the screw is tightened, it will force the rack D firmly against the plate B, so that it will be held friction-tight, thus making the motion smooth and exact.

The operation of my device is as follows: To open the spring-jacket, the spanner O is turned up to release the crank N and the crank is thrown into the position shown by the dotted lines. This turns the pinion, which pushes the rack D to the right, thus forcing the spring-jacket apart at the opening C therein. To close the jacket, the crank is turned back into the position shown in the drawings. The screw-stud Q allows the spanner to be screwed down firmly upon the crank, so as to hold it perfectly tight.

The mechanism for the core is similar to that for the jacket, excepting that the rack and straps are mounted upon the inside of the core and are curved to fit therein, and the spanner is placed upon the side of the core on which the pinion-shaft L is mounted, so as to lock the crank when the core is open. The principle of the mechanism is not changed in adapting it to the core.

Now having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a pipe-mold, the combination of the spring-jacket or core, the racks attached to and projecting beyond one of the edges thereof, a shaft journaled upon the other edge thereof, pinions attached to such shaft, and means, substantially such as described, for rotating the shaft.

2. The combination of the jacket A, slotted strap E, provided with a loop or journal, J, rack D, shaft L, pinions M, and stud G.

3. The combination of the jacket A, rack D, loop or journal J, shaft L, pinions M, crank N, spanner O, and set-stud Q.

4. In a pipe-mold substantially such as set forth, the combination of the pinion-shaft L, loop or journal J, set-screw S, and rack D.

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Witnesses:
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